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ABSTRACT

Project activities primarily consisted of curriculum-writing workshops conducted for 503 educators in ten state regions. Workshops included career education orientation, procedures for career education curriculum infusion, and technical assistance in the writing process. The internal evaluation activities focused on assessing the process of infusing career education through career education-curriculum-writing workshops. Internal evaluations also included a critique of the workshop products. To some degree all of the following project objectives were met: (1) to reach a broad sample of teachers, levels K-12, (2) to increase receptivity to career education knowledge and improve career education implementation skills, (3) to familiarize 500 teachers with the set of Basic Learner Outcomes for Career Education and (4) the process used to infuse Basic Learner Outcomes into Subject matter, (5) to familiarize 500 teachers with steps on writing learning activity modules, (6) to develop a process of transmitting career education techniques to classroom teachers, (7) to produce 600 usable learning activities, and (8) to introduce teachers to available business, labor, and community resources as a means for infusing career education. (Among the appendixes are the participants' evaluation of phases 1 and 2 of the career education curriculum-writing workshops and the final external evaluation report.) (CSS)

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ED164768

SPECIAL PROJECT

CAREER EDUCATION

TEXAS EDUCATION AGENCY

1. Project No.: 554AH50547	2. Grant No.: G007503736	3. Nature of Report: _____Semi-annual _X_ Final
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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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CE 017 941

FINAL PERFORMANCE REPORT OF THE
TEXAS SYSTEM FOR INCREMENTAL QUALITY INCREASE PROJECT

USOE Grant Number G007503736

INTRODUCTION

The Texas System for Incremental Quality Increase was a project with the purpose of demonstrating effective means of facilitating increases in career education among students and to communicate those demonstrations to career education practitioners at local, regional, and state levels. The TSIQI project was funded by a grant under P. L. 93-380, Section 406 through the United States Office of Education, Office of Career Education.

MAJOR ACTIVITIES

The project activities primarily consisted of curriculum writing workshops conducted for 503 educators in ten separate regions of the state. The workshops were three days in duration and included career education orientation, procedures for curriculum infusion of career education, and technical assistance in the writing process. Products of the workshops include the printing and cataloging of 437 teacher developed learning "modules" in all subjects (K-12).

A schedule of the workshops appears in Appendix H while the map depicting the number of participants by region appears in Appendix C. Specific details of the workshops and their success are presented in the evaluation section of this report.

EVALUATION DESIGN

The internal evaluation activities focused on assessing the process of infusing career education through career education curriculum writing workshops. The process of infusing career education was presented in ten two-day and ten one-day, follow-up workshops. Each workshop was evaluated for overall structure including content, participants background, participant response, and leadership capability. The internal evaluation also included critique of the workshop products which were the learning activities generated by the workshop participants. The quality of the activities were rated according to clarity, appropriateness for grade level and subject area, variety, and content development.

Participants completed several evaluation forms among which were: 1) a background information questionnaire at the beginning of the first workshop; 2) an evaluation of the first workshop activities; 3) a questionnaire completed at the beginning of the second workshop, describing interim activities relating to career education; 4) an evaluation of learning activities produced at the Phase I workshops and refined by Partners in Career Education; and 5) an evaluation of the second workshop activities. Copies of the evaluation forms used and responses to each item may be found in Appendices A and B. It should be noted that the percentages reported in the text reflect the percentage responding to each item and not necessarily the percentage attending the workshops.

SUMMARY OF RESULTS

The objectives of the project that were addressed by internal evaluation activities are listed below. The degree to which each

objective was met is indicated in a summary of the evaluation findings.

Discussion of the results in the report may be found on the pages indicated.

Objective	Brief Description of Evaluation and Conclusion
A. *Background Information on Participants:* Reach a broad sample of teachers from grade levels K-12, in all major subject matter areas, and from all parts of the state.	The 503 participants did adequately represent all major subject areas and grade levels. (see page 5)
B. *Initial Attitudes Toward Career Education and Interim Activities of Participants:* Develop increased awareness of the philosophy of career education among participants by increasing their receptivity to and knowledge of career education while improving their skills in implementing career education	Participants had initially supportive attitudes toward career education. They had some experience in using career education principles, but lacked extensive training. The first workshop did motivate over half of the participants to implement career education in ways not previously tried. (see pages 6-7)
C. *Familiarity with the Basic Learner Outcomes for Career Education:* Familiarize 500 teachers with the Basic Learner Outcomes for Career Education.	Only three percent of the Phase I participants reported being very familiar with the Basic Learner Outcomes for Career Education. By the end of the Phase II workshops, the percentage had increased to 40 percent. All of the 177 Basic Learner Outcomes for Career Education were addressed by at least one learning activity. (see page 8)
D. *Familiarity with the Infusion Process:* Familiarize 500 teachers with the process to infuse the Basic Learner Outcomes for Career Education into subject matter areas K-12.	Few participants were familiar with the infusion process initially. As a result of the workshop activities, participants did produce 926 learning activities demonstrating the infusion of career education. Only four percent of the participants cited they could not explain the infusion process to others. (see page 9)

E. *Familiarity with Steps in Curriculum Writing:* Familiarize 500 teachers with steps on writing learning activity modules.	Teachers indicated that the Partners' curriculum writing format was a good way to write curriculum. Eighty-six percent of the participants stated that the Phase I module they evaluated was clearly written and 60 percent had explained the curriculum writing steps to others. (see page 9-10)
F. *Evaluation of Workshop Activities:* Develop and document a process that can later be packaged as a means of transmitting career education infusion techniques to classroom teachers.	The workshop evaluations, completed at the end of each session, indicated that the process was successful enough to merit further development and dissemination. A large majority of the participants reported that the workshop materials and activities were professionally managed; that the workshop objectives were clearly stated and understood by most of the participants; and that the activity designed to teach the writing of a module was the most useful activity. (see pages 10-12)
G. *Evaluation of Learning Activity Modules Produced at the Workshops:* Produce at least 600 usable learning activities in all major subject matter areas in grades K-12.	Of the 926 modules collected, 799 or 86.3 percent, were identified as usable learning activities. (see pages 12-14)
H. *Community Information Resource System:* Introduce teachers to the availability of resources in business, labor, and the community as a means for infusing career education.	The majority of the participants stated that the establishment of school-business-community relationships would be very beneficial to the students. A system presented to the participants for identifying and managing such resources was highly desirable to 98 percent of the respondents. (see pages 14-15)

DISCUSSION OF EVALUATION RESULTS

Participant Background Information

One of the project objectives was to assemble in a workshop setting a broad sample of teachers from grades K-12, representing all major subject matter areas and all geographic parts of the state. In this effort, ten educational service centers in the state each invited fifty teachers to participate in the workshops. The request for 500 produced 503 participants from 128 school districts; 495 attended the Phase I workshops with eight new participants at the Phase II sessions. The map appearing in Appendix C depicts the regional representation.

Of the 495 participants at the Phase I workshop, 407 or 82.2 percent were able to attend the follow-up workshop in the spring (see Appendix D). Non-return of 17.8 percent of the original participants was considered reasonable given the length of time between workshops and the individual circumstances that prevent attendance. Of those attending the Phase I workshops, 94.5 percent (N=468) voluntarily completed evaluation forms, while 98.8 percent (N=410) of the Phase II participants completed evaluations.

Eighty-seven percent (N=408) of the participants were teachers, 30 percent (N=152) teaching in high schools, 31 percent (N=147) from grades K through 6, and 24 percent (N=111) from the junior high schools. All of the major subject matter areas were represented, especially language arts, English, and social studies. Teaching experience varied among participants. About one-third (N=140) had been teaching less that five years

and slightly more than one-third (N=178) had over ten years teaching experience. The participants did represent a broad cross-section of grade levels and subject matter areas.

Initial Attitudes Toward Career Education

Another project objective was to develop philosophical awareness of career education and to promote acceptance of career education principles. Since it was assumed that the participants would not necessarily have training in career education, the workshops were designed minimally to provide a basic understanding of career education principles and the infusion process.

Responses to the background information form established that 53 percent (N=242) of the participants had no previous career education training. Most of those who had training reported attending only one prior training session. Sixty-nine percent (N=313) of the participants, however, reported they had used some career education materials previously. Thirty-four percent (N=148) reported that they had incorporated career education principles more than other teachers in their subject area (see Appendix A, items 5, 6, 6a, and 12). The participants, although they lacked intensive training, did have some experience in using career education principles.

The initial attitudes of the participants toward the principles of infusion of career education were indicated by responses to several items on the background questionnaire. Sixty-one percent (N=272) recognized the need for career education at all grade levels and 88 percent (N=405) related it was important to emphasize career education in all subject matter areas.

Only eight percent (N=35) stated career education should be taught specifically in "career awareness" classes (see Appendix A, items 8, 9, and 11). Overall, the responses indicated that those attending the workshops had initially supportive attitudes toward career education.

Interim Activities of Participants

Review of the reported behavior of the participants between the two workshops indicated that the first workshop did motivate participants to implement career education in ways not previously tried. As indicated in Appendix B (items 1 and 2) over half of the participants (N=233 and N=225, respectively) reported that they had used career education activities from the first workshop as well as other career education materials not previously tried. Of those teachers returning from Phase I, 56 percent (N=196) had used the module, written during the first workshop, in their own classroom. Those who did not use their learning activities could not because they had completed instruction in the particular topic, had not presented it in the semester, or were not currently teaching in a subject matter area relevant to the topic.

Familiarity with the Basic Learner Outcomes for Career Education

An essential step in curriculum writing was the incorporation of a learner outcome obtained from the Basic Learner Outcomes for Career Education. Some of the workshop activities were directed at increasing awareness of the Basic Learner Outcomes for Career Education and their relationship to the infusion process. Background information indicated that 64 percent (N=288) of the participants were not at all familiar with the Basic

Learner Outcomes for Career Education. It was appropriate, therefore, to provide the orientation. The workshops did substantially increase familiarity with the Basic Learner Outcomes for Career Education, as shown in Table I.

Table I

Familiarity with Basic Learner Outcomes for Career Education

Degree of familiarity reported by participants:	Phase I Workshop		Phase II Workshop	
	N	%	N	%
Very familiar with BLO	10	3	156	40
Somewhat familiar with BLO	151	33	231	59
Not at all familiar with BLO	288	64	6	1
Total Number	449	100	393	100

Familiarity and understanding were also demonstrated by the participant's ability to include a Basic Learner Outcomes for Career Education with a module. All of the 177 Basic Learner Outcomes for Career Education appeared in at least one module. A selected group of modules from the Phase I workshops were revised by Partners and critiqued by the participants to examine how well the module was directed to the career education learner outcome. Seventy-six percent (N=304) of the participants indicated that the module they reviewed was appropriately directed to the career education learner outcome. The production of usable products from the workshop was enhanced by the activities that familiarized the teachers with the Basic Learner Outcomes for Career Education.

Familiarity with the Infusion Process

Another project objective was to familiarize 500 teachers with the career education infusion process. Since it was assumed that very few of the participants were familiar with the Partners' infusion techniques, a preworkshop measure was not taken. By the end of the second workshop, the participants had produced 926 learning activity modules. Each activity was designed to achieve a desired learner outcome in career education by teaching the standard course content with an element of career education. Some knowledge of infusion was demonstrated by the production of the learning activities.

Familiarity with the infusion process was also reflected by responses to the workshop evaluation statement: "If I were asked to explain the infusion process to teachers unfamiliar with career education, I would have ..... no difficulty, some difficulty, or a lot of difficulty." Only four percent (N=14) said they would have a lot of difficulty. Almost 60 percent (N=227) recognized the need to infuse career education into the regular curriculum which may require enlisting all teachers at all grade levels (Appendix B, items 47 and 48). This understanding of infusion and the ability to communicate the concept of infusion is an important achievement of the project.

Familiarity with Steps in Curriculum Writing

Participants' understanding the process of infusing career education into regular classroom curriculum was enhanced by the steps on curriculum writing developed by Partners in Career Education. The steps in writing

included specifications of learner outcomes, performance objectives, curriculum content, student activities to achieve the objective, needed resources, and evaluation statements. The participants produced 926 modules using the format. Understanding of the format may be inferred from the evaluations of a sample of reviewed modules from the Phase I workshops (see Appendix B, items 7 through 36). Eighty-six percent (N=350) indicated that the module they critiqued was written in a manner that it would be comprehendable for teachers unfamiliar with the writing process. The teachers reported that the curriculum writing format was a good way to write curriculum and 60 percent (N=238) had explained the steps in curriculum writing to other teachers. These results reflect familiarity with the format as well as motivation to share the format with others.

Evaluation of Workshop Activities

It was expected that the project would develop a process that could be documented and later packaged as a means of transmitting career education infusion techniques to classroom teachers. Each of the two workshops received evaluation of content, format, and leadership to establish the quality of the process. Responses to the workshop evaluations, completed at the end of each session, indicated that the process was successful enough to merit further development and dissemination.

Appendix A (items 14 through 23) and Appendix B (items 37 through 51) allowed for responses to items on the two workshop evaluation questionnaires. A large majority of the participants reported that the workshop materials and activities were professionally managed. The pacing

of the activities was judged appropriate by over eighty percent of the participants (N=337 the first day, N=347 the second day, and N=336 the third day). A few teachers had difficulty maintaining the pace during the workshop. Conversely, prior experience caused some to report that they could have progressed faster. It was concluded, therefore, that the workshop format was appropriate for the large majority of the participants.

The workshop objectives were clearly stated and understood by most of the participants. One-fourth (N=114) of the Phase I participants indicated that the objectives could have been improved with additional clarification. Some participants did not understand the purpose of several of the game type activities used in Phase I. It was difficult to discuss the purpose of an activity until the participants had experienced it, but a brief statement may have clarified the activity, especially for those who had reservations about the game format.

Responses in the subjective comments section indicated which Phase I activities were perceived as most and least beneficial (see Appendix A, item 23). The activity designed to teach the writing of a module was cited as the most useful activity by twenty-three percent (N=113) of those commenting. This result received further support in that only three percent (N=12) cited that the preparation given for module development was inadequate. Notably, the primary purpose of the workshop, curriculum development, was favorably evaluated. Participants, by their evaluation, indicated that writing a module during the second workshop was easier. Half (N=205) indicated that their second module was better written than their first (Appendix B, items 40 and 41).

The quality of the staff conducting the workshops was reported as outstanding and certainly contributed to the success of the workshops. Subjective comments gathered at the end of the first workshop indicated that 17 percent (N=66) favorably regarded the staff, their helpfulness, supportive attitude, and sense of humor. The abilities of the staff aided in making the workshops enjoyable as well as productive.

Stated dislikes of the workshops primarily referred to game type activities during Phase I that participants stated as inappropriate. Some respondents (N=29) did not like the game format for communicating career education principles and another group (N=29) believed that the time gained by having fewer introductory activities could have been better utilized in module writing.

Evaluation of Learning Activity Modules Produced at the Workshops

A total of 926 learning activities were written by project participants. Each participant wrote at least one module at the two workshops. The project objective was to produce a minimum of 300 usable learner activities in the first phase of the project. This objective was surpassed with 363 learner activities. An additional 436 usable modules were produced during the second one-day workshop. Table II presents the number of modules collected during each workshop phase. The number of modules collected by subject area and grade level is presented in Appendix E.

The Partners staff identified the modules considered usable. A review of each module determined if the learning activity was feasible enough to warrant more extensive editing procedures. Modules classified as

unusable were retained by Partners for reconsideration and possible revision at a later date. All of the usable modules will be reviewed and edited for later dissemination through the Partners in Career Education catalogue.

Table II

Learning Activities Produced During
Phase I and Phase II Workshops

Modules	Phase I Workshop N	%	Phase II Workshop N	%	Total N	%
Usable	363*	80.3	436	92.0	799	86.3
Unusable	89	19.7	38	8.0	127	13.7
Total	452	100.0	474	100.0	926	100.0

* 390 usable modules were identified at the time of the midyear report. Subsequent review by Parnters had identified 363 usable Phase I modules.

It should be noted that more usable modules were produced during the Phase II workshops, 92 percent as compared to 80.3 percent, respectively. The training received during the first session and the interim career education behavior of most of the participants enabled them to write a learning activity of higher quality at the second session. The second workshop also began with a review of the criteria for a good module and evaluations of modules produced during Phase I. This follow-up critiquing activity assisted participants to focus on necessary elements of a usable module.

A sample of 83 modules, representative of the major subject matter areas, were selected by Partners from the group written during Phase I. These modules were edited and refined by Partners and given to workshop

participants in one of four grade-level groups. The criteria for editing each module are presented in Appendix F. In general, revisions were made to improve the clarity, feasibility, and completeness of the learning activities. How well the modules were directed to the Basic Learner Outcomes for Career Education and the performance objective through student activities in desired curriculum areas was noted.

The refined modules were evaluated by the Phase II workshop participants. Each participant was assigned a module from his or her own subject area and grade level. Each of the 83 modules received approximately five separate evaluations. A sample of the project's products by teachers with training in the infusion process were evaluated. Appendix B (items 7 through 36) provided participant responses to the evaluative criteria for revised modules. The evaluations were consistently positive. The most criticized aspect of the modules was the resources section necessary to implement the module. Because many schools do not have the needed equipment or reference materials to implement the module, learning activities generated by one teacher may have to be revised by teachers in other schools. On the basis of the module evaluations, it can be concluded that the process used to write career education learning activities does produce a usable product that, after professional review, adequately meets evaluative criteria.

Community Information Resources System

The Phase II workshop incorporated activities illustrating the use of community resources in infusing career education. As a follow-up to the school-business-community relationship activities, participants were

asked to evaluate the need of a community information resources system in their own schools. Responses, provided in Appendix G, indicated an extremely positive reaction to the value of and need for a community information resource system. Teachers were particularly interested in receiving information on community sites available for students to visit, video-tapes of on-site job activities, and available speakers to come into the classroom. Virtually all of the respondents stated that the interaction of students and people in the world of work was beneficial to the students in learning about work values, about attitudes toward work, about types of occupations, and about job requirements. Although 55 percent (N=207) of the respondents reported it would take additional school district personnel to establish the system, the need for a community information resources system was apparent.

Anticipated Changes and/or Problems

A major concern of the existing project was developing the capability of field testing students with the learning activities collected. The problems in accomplishment were twofold: 1) The learning activities collected were not refined soon enough to be distributed to test sites and 2) instrumentation was not developed, nor was a plan for developing instrumentation finalized, during the curriculum writing process.

A partial solution to the field testing problem was to have classroom teachers review a series of 83 learning modules (K-12) from a cross-section of subject areas using a formal rating sheet (see Appendix B).

Dissemination Activities

Finished curriculum products (N=437) that represent teacher constructed ideas of the best ways, in their opinion, to infuse career education with existing courses (K-12) have been printed and circulated to the following audiences:

1. United States Office of Education, Office of Career Education (Hoyt and Newell);
2. Chief State School Officers (Career Education) in each of the States;
3. Each of the 503 workshop participants;
4. Twenty regional education service centers in Texas;
5. Texas' Education Agency Program Directors; and
6. Other schools, special interest groups, and individuals.

In addition, copies of slide/tape presentations that explain the purpose for and describe the methods in utilizing community resources in career education were disseminated to all regional education service centers in the state and to the United States Office of Education, Office of Career Education.

Special Activities

Information and materials about the processes and products of the project were shared with the instructional staff at the Texas School for the Deaf. Also, a special presentation was delivered to the regional program directors and division chiefs of the Office of Education for the Deaf for the State of Texas. Approximately sixty educators were involved in the two additional activities.

APPENDICES

APPENDIX A

EVALUATION OF PHASE I CAREER EDUCATION CURRICULUM WRITING WORKSHOPS

EVALUATION OF PHASE I CAREER
EDUCATION CURRICULUM WRITING WORKSHOPS

Dates of workshops: September 24 - December 9, 1975

Total number of participants: 468*

I. Background Information

The following data represents the number and percentage of participants responding to items on the "Background Information on Workshop Participants" questionnaire.

A. Description of workshop participants	Number of Responses	% of Total
1. Teaching Assignment:		
K-Primary (K-3)	72	15
Intermediate (4-6)	75	16
Middle/Junior High	111	24
High School	152	33
Other	55	12
2. Position:		
Classroom teacher	390	85
Other	71	15
3. Indicate the subject area of your primary classroom responsibility:		
Agriculture	8	2
Distributive Education	6	1
Fine Arts	15	3
Foreign Language	2	1
Health Occupations	6	1
Home Economics	13	3
Industrial Arts & Arts & Crafts	17	4
Industrial Cooperative Training	3	1
Language Arts/English	64	14
Math	29	6
Office Education	7	1
Physical Education and Health	20	4
Science	23	5
Social Studies	48	10
Technical and Industrial	2	1
Typing and Business Education	13	3
Intermediate and/or K-Primary mult. subj.	126	27
Middle/Junior High and/or High School mult. subj.	18	4
Other	40	9

* Includes only those who completed the workshop and provided a workshop evaluation.

	Number of Responses	% of Total
4. Number of years of teaching experience:		
0-5 years	140	31
6-10 years	133	30
11-15 years	77	17
Over 15 years	101	22
Range: 1-37		
Average: 10.2		
5. Have you ever used any career education materials in your classroom?		
Yes	313	69
No	141	31
6. Have you had any career education training?		
Yes	215	47
No	242	53
6a. If yes, how many workshops or training sessions on career education have you attended?		
One	91	45
Two	35	18
Three	21	10
Four	17	9
Five and over	35	18
7. How familiar are you with the Basic Learner Outcomes for Career Education developed by the Texas Education Agency?		
very familiar	15	3
somewhat familiar	151	33
not at all familiar	288	64
B. Initial Participant Attitudes Toward Career Education		
8. It is most important to develop career education concepts at:		
K-Primary (K-3)	31	7
Intermediate (4-6)	33	7
Middle/Junior High	69	15
High School	45	10
All grade levels	272	61
9. It is most important to emphasize career education concpets in:		
the social studies and/or English curriculums	13	3
the math and/or science curriculums	2	1
the vocational and/or technical skills curriculums	33	7
the art and/or music curriculums	1	1
all subject matter curriculums	405	88

	Number of Responses	% of Total
10. Those individuals who have the most responsibility for conveying career education principles to students are:		
the parents	102	23
the teachers	296	67
school guidance counselors	31	7
community leaders and business representatives	12	3
11. Career education principles would be most appropriately taught:		
as part of regular classroom curriculum	163	36
in special "career awareness" classes	35	8
in regular classrooms as well as in special classes	252	56
12. Compared with other teachers in my area, I would say I have incorporated career education principles:		
more than most teachers	148	34
about the same as most teachers	232	53
less than most teachers	31	7
not at all	24	6
13. Career education means about the same things as:		
development of vocational and technical skills	3	1
development of career opportunity awareness	42	9
development of self awareness in relation to career choice	101	23
development of all of the above	300	67

II. Workshop Evaluation

The following represents the number and percentage of participants responding to items on the "Workshop Evaluation" questionnaire:

A. Objective Evaluations

14. The objectives of the workshop were:		
very clear	346	74
adequate, but could be improved with additional clarification	114	25
ambiguous and unclear	6	1
15. The management of time and materials during the workshop was:		
excellent	330	71
adequate	127	27
poor	10	2

	Number of Responses	% of Total
16. The pacing of the first day of the workshop was:		
too fast	39	8
appropriate	377	82
too slow	47	10
17. The pacing of the second day of the workshop was:		
too fast	52	13
appropriate	347	83
too slow	18	4
18. The preparation given for module development was:		
excellent	233	50
adequate	217	47
inadequate	12	3
19. In comparison to other workshops and staff development sessions, this workshop was:		
one of the best	230	50
above average	175	38
average	45	10
below average	>	1
one of the worst	1	<
20. Would you be interested in using the modules produced by this and future workshops in your own classroom?		
Yes	414	89
Maybe	46	10
No	2	1
B. Summary of responses to open-ended questions.		
21. Did you feel that any of the workshop activities were particularly useful or enjoyable?		
Yes	400	95
No	20	5
21a. If yes, please cite the activity and its usefulness.		
(1) Group Module Writing	113	23
(2) Newspaper Game	79	16
(3) Success Story	70	14
(4) Zoogler Game	66	14
(5) Individual Module Writing	63	13
(6) Games in General	41	8
(7) Consensus Game	23	5
(8) ABC's of Work Game	11	2
(9) Brainstorming Activity	5	1
(10) Film	5	1
(11) Interesting Page	4	1
(12) Other Activities (with less than four comments each)	8	2
	488	100

	Number of Responses	% of Total
22. Did you feel that any of the workshop activities were not particularly useful or enjoyable?		
Yes	76	18
No	344	82
22a. If yes, please cite the activity and its limitations.		
(1) Games in General	29	27
(2) Newspaper Game	21	20
(3) Zoogler Game	17	16
(4) Success Story Game	12	11
(5) There were NO "least helpful" activities	6	6
(6) Film	5	5
(7) Consensus Game	4	3
(8) Group Module Writing	4	3
(9) Other (with less than four comments each)	9	9
	107	100
23. Additional comments:		
(1) General positive comments (enjoyed it, fun and instructive, looking forward to the spring, keep up the good work in career education).	136	35
(2) The staff was excellent. They were supportive, helpful, and had a good sense of humor.	66	17
(3) The workshop helped improve skills in curriculum writing and knowledge of career education.	48	12
(4) There should have been fewer introductory game-type activities and more module writing experiences.	29	7
(5) The workshop was well-planned and organized.	23	6
(6) More time should have been given to module writing, discussion of career education, and questions and answer sessions on career education (too rushed to absorb it all).	21	5
(7) Enjoyed working in different groups and meeting teachers in other subject matter areas and grade levels.	18	5
(8) There should have been more information on materials to bring as resources.	15	4
		100

		Number of Responses	% of Total
23. Continued			
(9)	The purpose of each activity should have been made clearer and more concise.	13	3
(10)	Participants from some subject matter areas, such as art and music, needed more example material and some Basic Learner Outcomes for Career Education in their own areas.	7	2
(11)	The materials developed through the workshops should be sent out to all teachers.	4	1
(12)	Other comments with less than four responses each dealt primarily with personal situation in relation to career education.	12	3
	Total number of comments made (Average number of comments per workshop: 39.2)	392	100

APPENDIX B

EVALUATION OF PHASE II CAREER
EDUCATION CURRICULUM WRITING WORKSHOPS

EVALUATION OF PHASE II CAREER
EDUCATION CURRICULUM WRITING WORKSHOPS

Dates of Workshops: January 22 - March 9, 1976

Total number of participants: 411*

I. What's Happened Since the First Workshop?

A. Use of career education materials	Number of Responses	% of Total
1. Since the first workshop, have you used any of the activities contained in the workshop manual that you received?		
Yes	233	58
No	170	42
(10 non-teachers)		
2. Have you used any new career education materials in your classroom other than those from the workshop?		
Yes	225	56
No	176	44
(10 non-teachers)		
3. Since the first workshop, have you used, in your classroom, all or part of the module you developed during the first workshop?		
Yes	196	56
No	157	44
(58 not teaching at present)		
3a. If NO, what was the primary reason?		
The activity was not in the curriculum area I am currently teaching	55	38
The activity was based on a fall semester topic that was taught prior to the workshop	44	31
The activity, in my opinion, was not good enough to actually use	1	1
I already had my lesson plans developed and there was not enough time to include the activity	17	12
I could not obtain the resources or materials required to use the activity	4	3
Other reasons**	22	15

* Includes only those who completed the workshop and provided workshop evaluations.

** The seven people commenting indicated they had not yet reached the topic covered by the module in their spring classwork.

	Number of Responses	% of Total
4. Have you written any career education modules since the first workshop?		
Yes	103	26
No	297	74
4a. If YES, how many modules?		
One to two	65	64
Three to five	27	27
More than five	9	9
4b. If YES, have you used any of them in your own classroom?		
Yes	55	54
No	36	35
Not teaching at present	11	11
B. Discussions with others		
5. Have you explained the steps in curriculum writing to any of your colleagues?		
Yes	238	60
No	161	40
5a. If YES, have any of them used the curriculum writing steps to write their own career education materials?		
Yes	28	12
No	55	23
Do not know	151	65
6. Additional comments regarding your interim activities.		
(1) Have exchanged ideas with others, gotten positive response	21	18
(2) Have been involved in specific career education activities	18	15
(3) Have more awareness of infusion and career education	16	14
(4) Have used career education in class but without formal plan for teaching	16	14
(5) Module taught in class was successful but needed some modifications	9	8
(6) General positive comments	9	8
(7) Had limited time because of other comments	8	7
(8) Workshop for them	8	7
(9) Used workshop "games" in class - very useful	7	6
(10) Format useful in preparing course outlines	4	3
Total	116	100%

	% Strongly Disagree		% Neutral		% Strongly Agree
II. Participant Evaluation of the Teacher-Developed Curriculum Modules					
A. Module Evaluations					
7. The module is appropriate for the subject area indicated	2	1	6	32	59
8. The learning activity module is appropriate for the grade level indicated	3	4	12	27	54
Learner Outcome					
9. The module addressed the career education learner outcome	3	3	17	37	40
10. The learner outcome as stated is an unrealistic goal for students in the subject area indicated	61	27	6	5	1
11. The learner outcome as stated is a unrealistic goal for students at the grade level indicated	60	25	8	6	2
Performance Objective					
12. The performance objective is not clearly stated	54	23	7	9	7
13. The performance objective adequately describes the behavior expected of the student upon completion of the module	3	7	9	35	46
14. Elements of both the curriculum content and the learner outcome are clearly shown in the performance objective	4	6	12	43	35
Curriculum Content					
15. The curriculum content is compatible with the learner outcome	5	6	10	39	40
16. The curriculum content is compatible with the performance objective	2	5	9	41	43
17. Some parts of the curriculum content are not sufficiently developed within the module . .	24	32	16	19	9
18. The curriculum content is not written in consistent outline or sentence form	60	21	7	7	5

	% Strongly Disagree		% Neutral		% Strongly Agree
Student Activities					
19. The activities lack a logical sequence	54	24	7	8	7
20. The activities are sufficiently varied in type (reading, role-playing, viewing) to be appropriate for students with different learning styles and abilities	6	8	16	38	32
21. The activities are not sufficient enough to enable the student to attain the performance level given in the performance objective or learner outcome	40	32	13	10	5
22. Each activity relates to curriculum content and/or learner outcome	3	6	12	37	42
Resources					
23. The resources needed to implement the module are inadequately identified	41	26	12	11	10
24. Some of the resources listed are not available at my school	42	15	13	15	15
25. Complete information is given for each resource listed	10	11	15	22	42
Evaluation					
26. The student behavior described in the performance objective and/or learner outcome cannot be measured by the evaluation statement . . .	42	25	10	13	9
Overall Module					
27. The module is written clearly enough for it to be understood by a teacher who is unfamiliar with the writing process	3	3	8	40	46
28. This module would be helpful to me when explaining the infusion process to another teacher	5	4	18	32	41
29. The module would have to be revised greatly before it could be used in my school	49	26	10	8	7

	Number of Responses	% of Total
30. Please indicate the amount of classroom time you feel would be needed to implement this module:		
one hour (one class) or less	18	5
over 1 hour - 7 hours (1 day)	25	6
over 1 day - 5 days (1 week)	130	32
over 1 week - 2 weeks	84	21
over 2 weeks - 6 weeks	96	24
over 6 weeks	15	4
could not estimate	34	8

B. Summary of Module Evaluations	% Disagree	% Neutral	% Agree
31. Learner Outcome	2	23	75
32. Performance Objective	2	33	65
33. Curriculum Content	4	26	70
34. Student Activities	4	27	69
35. Resources	8	49	43
36. Overall module evaluation	3	23	74

III. Phase II Workshop Evaluation

A. Evaluation of Workshop Activities and Facilities	Number of Responses	% of Total
37. The physical facilities provided for the workshop were:		
Excellent	242	61
Adequate	143	36
Poor	10	3
38. The management of materials during the workshop was:		
Excellent	332	84
Adequate	63	16
Poor	0	--
39. The pacing of the second workshop was:		
Too fast	47	12
Appropriate	336	86
Too slow	10	2
40. In comparison to the first workshop, the writing assignment for the second workshop was:		
Much easier	165	42
Somewhat easier	146	37
About the same	41	10
Somewhat more difficult	36	9
Much more difficult	7	2

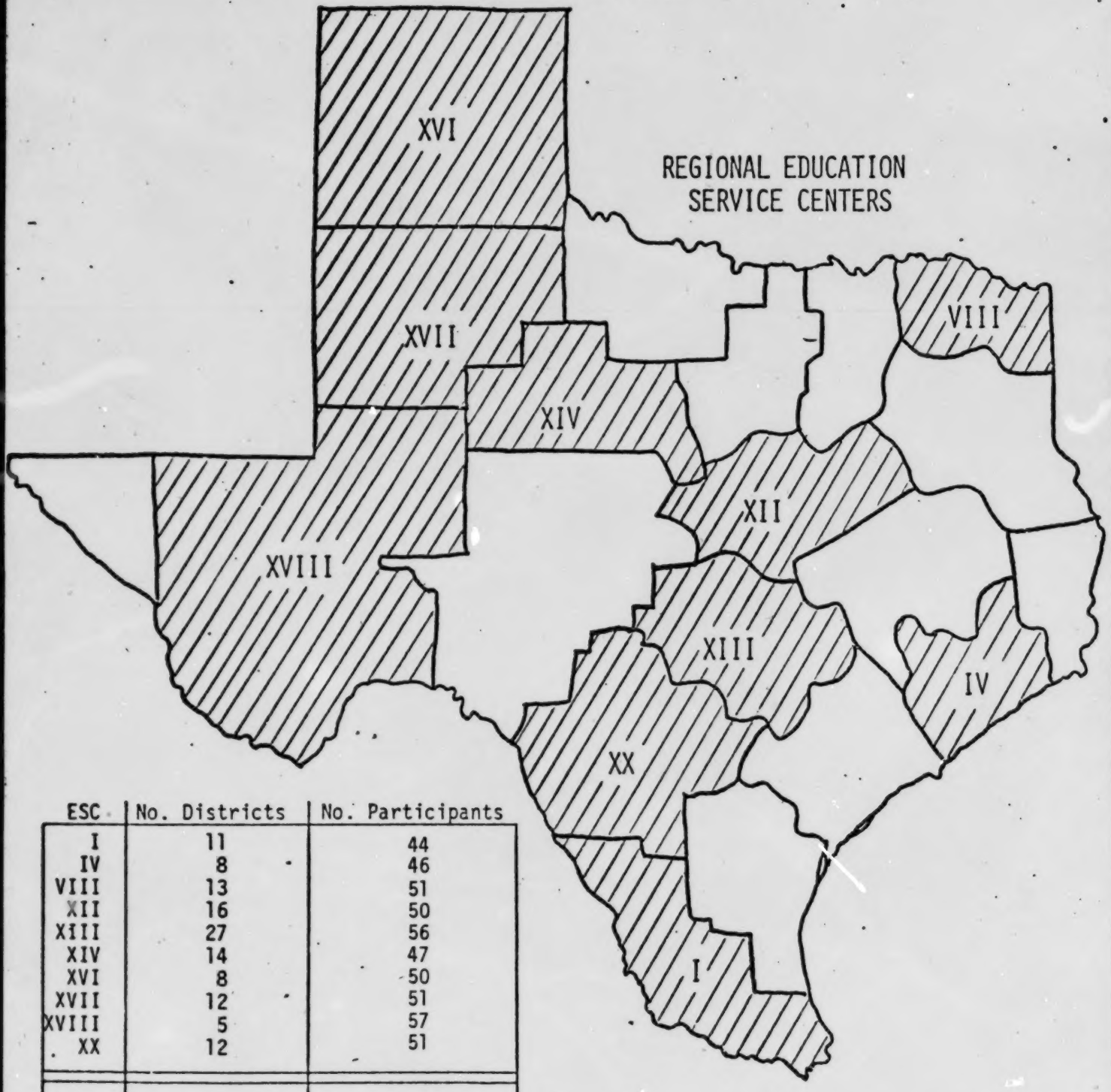
	Number of Responses	% of Total
41. In comparison to the module written during the first workshop, the modules I wrote today were:		
Much worse	11	3
Somewhat worse	38	10
About the same	137	35
Somewhat better	168	43
Much better	37	9
42. The leadership provided by the workshop team was:		
Excellent	298	75
Above average	81	20
Average	16	4
Below average	1	1
Poor	0	--
43. The second workshop was an:		
Appropriate follow-up to the first workshop	387	98
Inappropriate follow-up to the first workshop	6	2
44. In comparison to other workshop and staff development sessions, this workshop was:		
One of the worst	6	2
Below average	6	2
Average	54	13
Above average	181	46
One of the best	147	37
B. Evaluation of the curriculum writing process as a means of infusing career education		
45. The module development process used in the workshop is:		
An excellent way to write curriculum	156	40
A good way to write curriculum	231	59
A poor way to write curriculum	6	1
46. The Basic Learner Outcomes for Career Education are:		
Very familiar to me	96	24
Somewhat familiar to me	285	72
Not at all familiar to me	15	4
47. If I were asked to explain the infusion process to teachers unfamiliar with career education, I would have:		
No difficulty	155	39
Some difficulty	225	57
A lot of difficulty	14	4

	Number of Responses	% of Total
48. Regular classroom teachers should be expected to infuse career education concepts into their curriculums:		
Regardless of the subject area of grade level taught	227	58
Only if they volunteer to do so	81	21
Only in particularly appropriate subject areas or grade levels	85	21
49. Participation in the workshops has broadened my understanding of career education:		
A great deal	309	80
Somewhat	76	19
Very little	3	1
50. As a result of participation in the workshops, my attitude toward career education has:		
Become more favorable	315	81
Stayed about the same	70	18
Become more unfavorable	3	1
51. Comments:		
(1) General positive comments	46	55
(2) Excellent staff	14	17
(3) Workshops have broadened by development and knowledge of career education	7	8
(4) General negative comments (i.e. still have many questions, it has been a waste of time)	6	7
(5) Need more emphasis on a whole system of infusing career education; the format used is too limiting	6	7
(6) Having Basic Learner Outcomes assignment before workshop was helpful	3	4
(7) Less time was wasted at second phase.	2	2
Total	84	100%

APPENDIX C

REGIONAL MAP OF AREA SERVED
BY THE PROJECT

REGIONAL MAP OF
AREA SERVED BY THE PROJECT



ESC	No. Districts	No. Participants
I	11	44
IV	8	46
VIII	13	51
XII	16	50
XIII	27	56
XIV	14	47
XVI	8	50
XVII	12	51
XVIII	5	57
XX	12	51
N=10	N=128	N=503

APPENDIX D

ATTENDANCE OF PARTICIPANTS BY REGION

ATTENDANCE OF PARTICIPANTS BY REGION

Regional ESC	Attended Phase I Workshop (wrote at least one module)	Attended Phase II Workshop			Number of Evaluation Forms	
		Returning from Phase I	New at Phase II	Total	Phase I	Phase II
Edinburg (I)	44	28	0	28	47	28
Houston (IV)	46	31	0	31	44	31
Mt. Pleasant (VIII)	48	44	3	47	48	44
Waco (XII)	50	44	0	44	48	44
Austin (XIII)	54[1]	39	2	41	51	40
Abilene (XIV)	47	46	0	46	48	46
Amarillo (XVI)	50	43	0	43	50	43
Lubbock (XVII)	50	46	1	47	42	47
Midland (XVIII)	56	52	1	53	37	52
San Antonio (XX)	50[1]	34	1	35	53	35
TOTAL	495	407[2]	8	415	468[3]	410[4]

[1]Totals corrected from those in the mid-year report.

[2]82.2% of those attending the Phase I workshops completed evaluation forms.

[3]94.5% of those attending Phase I workshops completed evaluation forms.

[4]98.8% of those attending Phase II workshops completed evaluation forms.

APPENDIX E

CAREER EDUCATION LEARNING ACTIVITIES COLLECTED DURING PROJECT BY SUBJECT AREA AND GRADE LEVEL

CAREER EDUCATION LEARNING ACTIVITIES COLLECTED
DURING PROJECT BY SUBJECT AREA AND GRADE LEVEL

SUBJECT	Kinder-garten	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	TOTALS	%
Social Studies	11	11	15	13	17	22	19	12	25	12	8	12	16	193	20.8
Language Arts/English	8	15	10	.19	18	12	26	22	27	30	26	19	12	244	26.3
Mathematics	5	4	1	4	15	8	12	13	11	12	8	7	4	104	11.2
Health	2	4	2	2	13	6	4	3	0	1	3	3	1	44	4.8
Science	2	3	3	3	11	0	5	7	16	6	12	2	1	71	7.7
Physical Education	1	3	4	.3	6	3	3	10	5	12	11	3	0	64	7.0
Art	4	4	4	6	4	3	3	5	6	5	0	0	2	46	5.0
Music	0	0	0	0	0	2	2	2	0	3	2	0	0	11	1.2
Vocational, Industrial Arts and Others	0	0	0	0	0	0	0	20	28	25	21	41	14	149	16.0
TOTALS	33	44	39	50	84	56	74	94	118	106	91	87	50	929	
Percent By Grade Level	3.6	4.7	4.3	5.4	9.1	6.0	8.0	10.1	12.7	11.4	9.9	9.4	5.4		
		(18.0)				(23.1)			(34.2)			(24.7)			

APPENDIX F

PARTNERS' CRITERIA FOR EDITING MODULES

PARTNERS' CRITERIA FOR EDITING MODULES

GENERAL

1. The module is appropriate for the subject area.
2. The module is appropriate for the grade level.

LEARNER OUTCOME

3. The learner outcome is appropriate for the subject and grade.

PERFORMANCE OBJECTIVE

4. The performance objective is clearly stated.
5. The performance objective adequately describes behavior expected of the student upon completion of the module.
6. Elements of both the curriculum content and the learner outcome are shown in the performance objective.

CURRICULUM CONTENT

7. The curriculum content is compatible with the learner outcome.
8. All parts of the curriculum content are developed by the activities.
9. The curriculum content is written in consistent outline or sentence form.

STUDENT ACTIVITIES

10. The activities are in a logical sequence.
11. The activities are varied in type (reading, role-playing, viewing).
12. Each activity relates to curriculum content and/or learner outcome.
13. The activities are sufficient to enable the students to obtain the performance objective.

RESOURCES

14. The resources that are needed are identified.
15. Complete information is given for each resource listed.

EVALUATION

16. The student behavior described in the performance objective can be measured by the evaluation statement.

17. The module is written clearly enough for it to be understood by a teacher who is unfamiliar with the writing process.

18. This module would be helpful to me when explaining the infusion process to another teacher.

19. The module would have to be revised greatly before it could be used in my school.

20. This module development process is an appropriate way to write curriculum.

APPENDIX G

EVALUATION OF COMMUNITY INFORMATION RESOURCES SYSTEM
(N=376)

EVALUATION OF COMMUNITY INFORMATION RESOURCES SYSTEM
(N=376)

	% Strongly Agree		% Neutral		% Strongly Disagree	% No Response
1. A community resources system would be of value in my school district	63	35	1	0	0	1
2. I would prefer the convenience of having arrangements made for a speaker to visit my classroom	28	45	8	15	2	1
3. Information and suggestions concerning community sites available for students to visit would be valuable	61	37	1	1	0	0
4. When an on-site visit or a speaker is not practical, I would use a video tape in my classroom if it were made available	34	50	5	9	1	2
5. I would use a video tape as a substitute for a visit or a speaker only if someone set up and operated the equipment . .	10	14	10	39	25	3
6. Schools should help students become increasingly aware of varied occupations and lifestyles of people in their community	77	22	1	0	0	0
7. The use of community resources can help students relate what they are learning in textbooks to what they actually need in life	76	23	1	0	0	0
8. Contact with individuals in the community can help students learn about work values and attitudes people have toward their work	72	27	0	1	0	0
9. Interaction with people in the world of work can help students identify actual requirements, availability, and the advantages and disadvantages of different jobs	71	28	1	0	0	0
10. Students should know about unpaid work that is done in the community, such as hobbies, volunteer work, civic endeavors, etc.	60	38	2	0	0	0

	% Strongly Agree		% Neutral		% Strongly Disagree	% No Response
11. I would be willing to contribute ideas and suggestions to help build a community resources system	35	58	6	1	1	0
12. I would be willing to complete brief request and evaluation forms of speakers and visits	28	61	7	3	1	1
13. Additional personnel would be necessary in order to establish a community resources system in my school district. .	22	33	18	19	7	1

APPENDIX H

WORKSHOP SCHEDULE

FALL WORKSHOP SCHEDULE

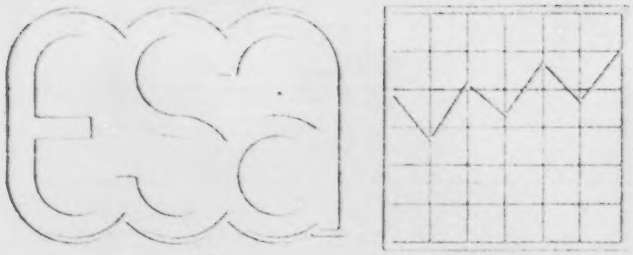
September 24-25	Region XX	San Antonio
October 6-7	Region XI	Amarillo
October 8-9	Region XVII	Lubbock
October 14-15	Region XIII	Austin
October 22-23	Region XIV	Abilene
October 28-29	Region VIII	Mt. Pleasant
November 6-7	Region XII	Waco
November 18-19	Region IV	Houston
December 2-3	Region I	Edinburg
December 8-9	Region XVIII	Midland

SPRING WORKSHOP SCHEDULE

January 22	Region VIII	Mt. Pleasant
January 29	Region XII	Waco
February 3	Region XVI	Amarillo
February 4	Region XVII	Lubbock
February 10	Region XVIII	Midland
February 11	Region XIV	Abilene
February 18	Region XX	San Antonio
February 19	Region XIII	Austin
February 24	Region IV	Houston
March 9	Region I	Edinburg

APPENDIX I

FINAL EXTERNAL EVALUATION REPORT



EDUCATIONAL SYSTEMS ASSOCIATES, INC ◦ serving learning through science

FINAL EXTERNAL EVALUATION REPORT

"TEXAS SYSTEM FOR INCREMENTAL QUALITY INCREASE"
TEXAS EDUCATION AGENCY
Division of Career Education

Prepared by:
EDUCATIONAL SYSTEMS ASSOCIATES, INC.
Austin, Texas

June, 1976

OVERVIEW

The thrust of the project's evaluation effort was provided from two sources. TEA conducted the internal evaluation activities, while Educational Systems Associates, Inc. (ESA) provided direction and guidance in an external evaluation capacity, largely responsible for the context analysis and input evaluation phases, as well as a summative assessment of overall project effort.

A major function of the internal evaluator has been the design, administration and analysis of instrumentation (questionnaires) to provide feedback information on the series of curriculum workshops, in which various career education Learning Activities have been generated. This particular project accomplishment and evaluation activity fulfilled a most important planned component of the project.

Supplementing this effort, ESA consultants provided evaluative input early in the project's life. This input, in conjunction with project staff, yielded several tangible outcomes to support the project's successful implementation. These included:

- A Project Time Line to assist in coordinating and monitoring of project activities.
- An On-site Workshop Observation Report (ESA consultant) to provide qualitative feedback to project staff.

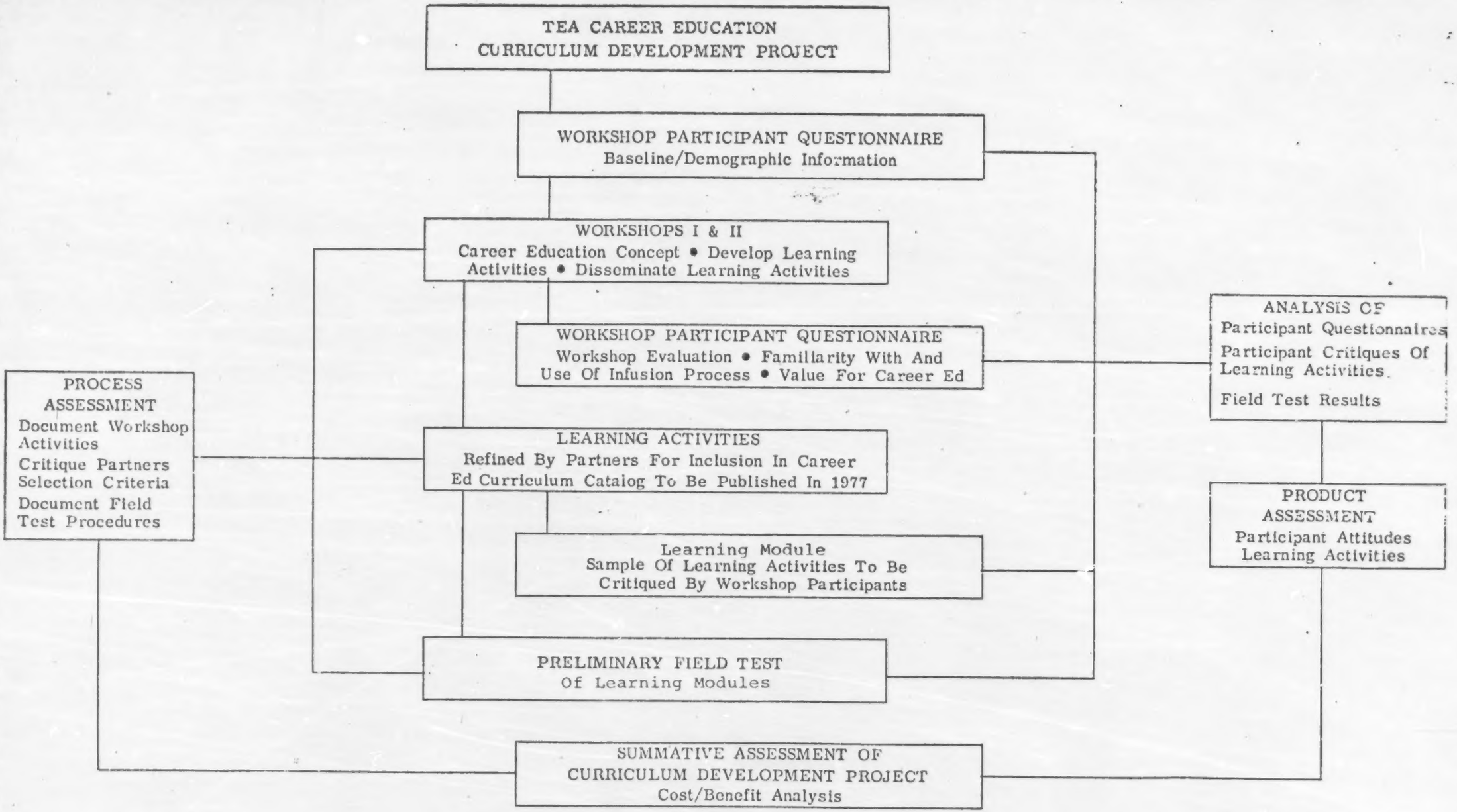
- An overall project Evaluation Design to guide the total evaluation and documentation efforts.

The following pages summarily describe the project's accomplishments, highlighting each critical component of the project.

EVALUATION COMPONENTS

The "Texas System for Incremental Quality Increase" was a career education project in which the Career Education Department of the Texas Education Agency was serving to coordinate and facilitate various career education efforts throughout the state of Texas. The main thrust of the project this year was 1) to aid Partners in Career Education in presenting ten two-part workshops designed to instruct classroom teachers in the process of infusing career education into their classroom learning activities, 2) to produce 437 learning activities which can be included in a Career Education Curriculum Catalog tentatively planned to be published in the spring of 1977, 3) to create positive responses toward career education in the workshop participants, and 4) to develop and document a process that can later serve as a basis for a packaged, transportable model in curriculum infusion techniques which can be used to disseminate the career education concept to classroom teachers throughout the state of Texas.

The evaluation segment of this far-reaching project concentrates on two main areas. First, the processes and products of the workshops were evaluated in terms of overall format, participant background, participant response, and the quality of the learning activities generated. Second, the learning activities were evaluated for clarity, consistency, usability, and effectiveness. An evaluation schematic is provided on the following page in order to define the various components in the evaluation effort of this project.


TEA CAREER EDUCATION
CURRICULUM DEVELOPMENT PROJECT
WORKSHOP PARTICIPANT QUESTIONNAIRE
Baseline/Demographic Information
WORKSHOPS I & II
Career Education Concept • Develop Learning Activities • Disseminate Learning Activities
WORKSHOP PARTICIPANT QUESTIONNAIRE
Workshop Evaluation • Familiarity With And Use Of Infusion Process • Value For Career Ed
ANALYSIS OF
Participant Questionnaires
Participant Critiques Of Learning Activities
Field Test Results
PROCESS ASSESSMENT
Document Workshop Activities
Critique Partners Selection Criteria
Document Field Test Procedures
LEARNING ACTIVITIES
Refined By Partners For Inclusion In Career Ed Curriculum Catalog To Be Published In 1977
PRODUCT ASSESSMENT
Participant Attitudes
Learning Activities
Learning Module
Sample Of Learning Activities To Be Critiqued By Workshop Participants
PRELIMINARY FIELD TEST
Of Learning Modules
SUMMATIVE ASSESSMENT OF CURRICULUM DEVELOPMENT PROJECT
Cost/Benefit Analysis

PROJECT EVALUATION SCHEMATIC

Workshop Participant Questionnaire (Pre)

At the opening of the first session of the Curriculum Development workshops, the participants were asked to complete a two-page questionnaire. The information requested of each participant included questions regarding their teaching background (e.g., grade level, subject, number of years), experience with career education and the Basic Learner Outcomes for Career Education, and their basic attitudes toward career education. The data provided has been thoroughly analyzed and displayed in the Final Performance Report summarizing each of the ten workshops. The summary provides a basis for:

1. measuring changes in attitudes toward career education,

2. determining what grade levels or subject areas have had the greatest exposure to career education efforts and which have had the least, and

3. drawing conclusions on the effectiveness of various workshop activities in relation to the participant's teaching experience and/or level of exposure to career education.

Workshops I and II

The first segments of the ten two-part workshops were given from September 24 - December 9. Each workshop was attended by

approximately 50 participants. The first segment was organized to give each participant a familiarity with the career education concept, exposure to career education activities, an introduction to the Basic Learner Outcomes for Career Education, and instruction in curriculum infusion techniques. The major activity of the workshop was the writing of one learning activity module by each participant.

In response to participant input, the basic format of the workshop was refined and improved by the leaders in each successive presentation. With modification, the format and activities developed for this workshop can be adapted to the written model which is planned to be developed in the next project year.

The second segments of the workshops were scheduled for January 22 - March 7. The participants were asked to critique a sample of the learning activities produced in the fall sessions and to write at least one additional learning module.

In addition, they were given a packet of refined learning activities to disseminate to fellow teachers in their schools.

Workshop Participant Questionnaires (Post)

At the conclusion of the first segment of the Curriculum Development Workshops, the participants were asked to evaluate the overall format and the specific activities. A complete analysis of their reactions is presented as part of the internal Workshop Evaluation. This information will be of particular value in

developing the transportable curriculum infusion model during the next project year.

An extensive teacher survey was given to the participants at the end of the second segment of the workshops. This instrument was designed to answer the following questions:

1. Have the participants changed their attitudes or understanding of the career education concept?

2. Did the participants increase their familiarity with the Basic Learner Outcomes?

3. Are the participants familiar with the Partners curriculum infusion format?

4. How do the participants evaluate the concept of infusion?

5. Did the first workshop experience motivate participants to implement career education in their own classrooms in new ways?

Learning Activities

One of the main objectives of this project was to produce at least 300 usable learning activities. The rough drafts of learning activity ideas produced by the participants at the workshops were collected by the Partners Workshop leaders. The rough drafts were typed and a copy was returned to

the participant "as is". The Partners staff then reviewed the rough drafts for usable ideas which could be refined, modified, or expanded for inclusion in the curriculum catalog to be published as part of the next project year.

Learning Modules

In this project phase the staff of Partners in Career Education refined approximately 437 learning activities which were grouped into Learning Modules. These packets were organized by grade level and subject matter. The modules were critiqued by the workshop participants at the beginning of the second session of the workshops. The results of the critique were analyzed for the teacher participant comments on the clarity and usability of the activities. The critiquing exercise also provided an excellent "refresher" activity for the returning participants.

The Learning Module was designed for the participant to keep and to share with other teachers within his/her school building. This limited distribution of sample learning activities constituted the major external dissemination of a tangible product in this project year.

Preliminary Field Test

A preliminary field test using the CEMS measurement system was originally planned, in conjunction with Educational Service Center #10. However, since the testing system itself had not

been fully validated, the volume of Learning Modules was immense (437). And, since the main thrust of Partners refining effort to produce polished Learning Modules could not begin until the spring workshops were completed, the preliminary field test was not conducted. Further, since the CEMS system does not provide test instruments for elementary levels, it was felt that the elementary level assessment must be addressed before a satisfactory field test could be conducted. Field testing is one area which has been discussed in some length with project staff, and has been recommended as a necessary component to further product development efforts.

Analysis of Data

The measurable data generated by this project was essentially the workshop participant questionnaires and surveys and the participant critiques of the Learning Modules. The data from the background information surveys and the evaluation questionnaires for the first segment of the workshop has been compiled, analyzed and displayed in the individual evaluation reports for each workshop. Once the two workshop stages were completed, data from all participants was compiled to draw general conclusions about the overall success of the workshop format, content, and products. This detailed information is contained as part of the internal evaluation effort.

Process Assessment

The process assessment of this project consists mainly of

documentation. All of the first ten workshops were monitored by the project director. Each workshop's activities were outlined for the participants in the form of a schedule. This schedule was seldom broken, though changes were made from group to group. Educational Systems Associates, Inc. participated in the seventh workshop and reported observations, impressions, participant reactions, and recommendations to project staff.

The selection criteria and the refinement process used by Partners on the learning activities generated by the workshops was documented and critiqued for consistency, and is contained in the Internal Evaluation Report.

Product Assessment

Drawing from the analyses of participant opinions, responses, and critiques, a final assessment was made of the effectiveness of the workshop format and activities in improving the attitudes and committment of the teacher-participants to career education and to using curriculum infusion techniques. Assessment was made of the overall value of the learning activities generated by the workshops. These assessments, according to each stated project objective, constitute the major thrust of the internal evaluation effort, and are described in some detail in the Final Performance Report.

Summative Assessment

Due to the nature of this curricular developmental project,

the external evaluation efforts were primarily formative in nature - generally helping in the development of the program. The purpose of summative evaluation is to assess the overall effectiveness of the program. Thus, since this type of evaluation is the assessment of an already developed product or program, it was not totally appropriate for this project. However, there are several general areas which warrant comment and may offer some consideration to the project's effectiveness.

- Basic Learner Outcomes for Career Education - Texas has developed a comprehensive set of learner outcomes for career education. This project assisted in furthering teacher awareness of these outcomes, through the nucleus of 500 career education contacts from around the state.

- Career Education Learning Modules - A total of 437 Learning Modules were developed as a result of the proejct. These have been disseminated both to the participants and the twenty regional service centers throughout the state.

- Slide/Tape Presentation - As an add-on benefit of the project, a six-minute slide/tape presentation has been developed and distributed to the twenty regional service centers. This presentation addresses the "utilization of community resources". There is currently one

additional presentation being finalized as the project wraps up.

- Cost/Benefit Analysis - While initially being considered, the project evaluation effort has not been able to conduct a cost/benefit analysis, primarily for the reason that the project did not, within its scope, allow for a determination of alternative ways to achieve the stated objectives.

At one point, several "cost considerations", such as cost/Learner Module, cost/participant, cost/workshop, etc. were to be incorporated as an add-on feature to the evaluation effort. However, even these determinations were not readily attainable, since the project budget was not categorized to allow cost factors to be restated to the variables. For example, the salary levels of the reviewers of the Learning Modules were treated as part of subcontract with Regional Service Center X, and thus not part of the project's cost records. Should such cost/benefit and/or cost consideration analyses be desired in subsequent project years, it is suggested that the fiscal accounting be established with regard to the critical variables of such a study.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

CAREER EDUCATION PROGRAM

PARTICIPANT SUMMARY

NOTE. Participants include those DIRECTLY served by the project or, in the case of most parents and persons in the business/labor industry community, who actively assist in project implementation. "Actively assist" includes efforts such as serving as resource persons, serving on Advisory Groups, providing work experience, etc.

FORM APPROVED
OMB NO. 51-R1187

NUMBER OF PARTICIPANTS (see NOTE above) AND ARE	RACE/ETHNICITY (all Participants including Handicapped, Gifted and Talented, and Low Income)						OF THE TOTAL (column (6)) NUMBER WHO ARE			OF THE TOTAL (column (6)) NUMBER WHO ARE	
	AMERICAN INDIAN OR ALASKAN NATIVE (1)	ASIAN OR PACIFIC ISLANDER (2)	BLACK, NEGRO (3)	CAUCASIAN, WHITE (4)	HISPANIC (5)	TOTAL (sum of columns (1) through (5)) (6)	HANDICAPPED (7)	GIFTED AND TALENTED (8)	LOW INCOME (9)	MALE (10)	FEMALE (11)
STUDENTS											
ELEMENTARY (K-6)											
MIDDLE/JUNIOR HIGH (7-9)											
SENIOR HIGH (10-12)											
2-YEAR COLLEGE											
4-YEAR COLLEGE											
ADULTS (non-matriculated)											
SUB-TOTAL											
EDUCATIONAL PERSONNEL											
TEACHERS			9	390	36	435				103	332
COUNSELORS			0	22	2	24				11	13
ADMINISTRATORS			2	40	2	44				23	21
MEMBERS OF THE BUSINESS/INDUSTRY COMMUNITY											
OTHERS											
TOTAL	0	0	11	452	40	503					

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